



ORIGINAL RESEARCH PAPER

General Surgery

THE ROLE OF STEROID INJECTION FOR VOCAL FOLDS LESIONS IN PROFESSIONAL VOICE USERS

KEY WORDS: Benign, vocal folds, steroid

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ABSTRACT

Benign vocal fold lesions identified in professional voice users, frequently require further treatment after failure of conservative measures. The role of vocal fold steroid injection as a treatment option for select benign lesions was the focus of this study.

INTRODUCTION:

Benign vocal fold lesions identified in professional voice users, frequently require further treatment after failure of conservative measures. The role of vocal fold steroid injection as a treatment option for select benign lesions was the focus of this study. Steroid injection may avoid phonosurgery in some individuals thereby reducing the potential for adverse side effects associated with surgery. In patients who present with significant dysphonia, mucosal fold lesions are often identified during videostroboscopic examination. Benign vocal fold lesions such as vocal nodules, polyps and cysts are usually secondary to phonotrauma. These lesions are associated with chronic inflammation and variable fibrosis in the vocal fold cover and lamina propria. Management is multidisciplinary with medical, behavioral and potentially surgical treatment options.

Observation:

Professional voice users who presented to this tertiary referral voice clinic with dysphonia were the focus of this retrospective study. Voice Handicap Index-10 (VHI-10) before and after the steroid injection for a benign lesion

- In general, prenodular edema and vocal nodule patients demonstrated the highest reduction in VHI-10 of 25–30% with minimal or no overlap in confidence intervals post VFSI (vocal fold steroid injection).
- However, the patients with scar/fibrosis/sulcus showed minimal or no improvement post VFSI with wider variation (wider confidence interval) post injection.
- In the granuloma group (N =2), the mean VHI-10 decreased from 15 in the pre VFSI to 4.5. Both patients were already on maximum medical management of known LPR for more than 6 months prior to VFSI.

DISCUSSION:

- The management for the benign vocal folds lesions has been primarily conservative including speech therapy and management of medical comorbidities (i.e. reflux, smoking cessation, hydration) with phonosurgery options if these measure fail.
- In minor/small lesions, particularly in professional voice users, weighing the potential benefit versus adverse effects of phonosurgery is a serious consideration.
- Vocal fold steroid injection is an option to provide an accurate, site-specific delivery of a known anti-inflammatory agent and may avoid phonosurgery in some individuals

SUMMARY:

In this study, patients with inflammatory lesions appeared to benefit post VFSI as indicated by a reduction in VHI 10 score which was not observed in patients with scar/sulcus.

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